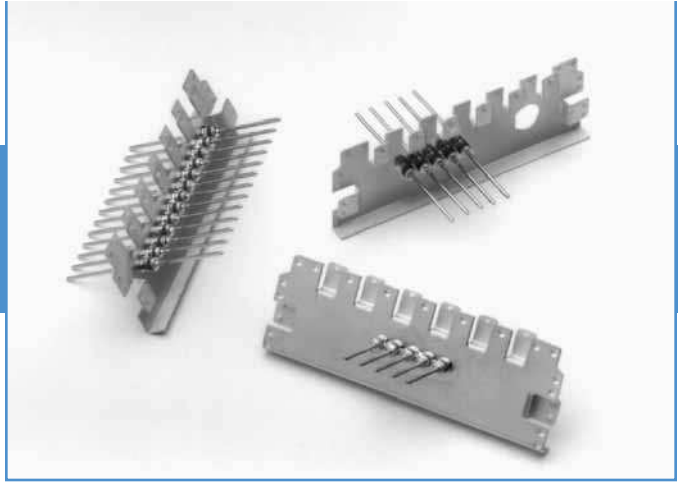
SPECTRUM CONTROL INC.

Easy Mate® Filter Plates



Spectrum Control developed a new EMI/RFI filter plate, Easy Mate®, which simplifies installation and eliminates the need for mounting hardware. The Easy Mate®, **patented**, is designed to "snap" into the chassis of electronic systems, reducing the labor required to complete a plate installation. The drawing on page 105 shows the Easy Mate® design.

These plates are available in two lengths and in both standard density centers (.100") and hi-density centers (2mm). Standard density Easy Mate® plates offer up to 26 lines per plate in a double row configuration, while hi-density plates offer up to 32 lines. Custom sizes for Easy Mate® plates are available.

Easy Mate® Advantages

- Reduces installation time and overall cost
- Eliminates mounting hardware and prepwork
- Flexibility for 1 or 2 rows and standard density centers (.100") or hi-density centers (2mm)
- Improves overall quality and reliability
- Multiple dimpled finger ground contacts provides excellent long term EMI filtering from 5 MHz to 18 GHz
- Outperforms surface mount devices
- Maximize real estate on PCB
- Mixed capacitance values and schematics
- Ideal for isolation of electronic compartments
- Available in RoHS compliant versions

Ordering Information

Example: **52-898-206-BA2**

The part number shown represents an Easy Mate® filter plate with 2 rows, 6 filters per row. Filters are C style with a capacitance value of 100pF. The plate length is 1.092", and the leads are bent 90° to the right side.

52	**	898	-	2	06	-	B	A	2
Filter Plates		898 Easy Mate® Standard Density 960 Easy Mate® Hi-density *		No. of Rows 1 = 1 row 2 = 2 rows	No. of Filters Number of Lines per Row If less than 10, use a 0 (zero) first.		Filter Designation A - T from table on page 118. ***	Plate Length A - 1.092 (27.74mm) B - 1.812 (46.02mm)	Lead Configuration 0 - Straight 1 - 90° (left) 2 - 90° (right) 3 - 90° (both)

* *Maximum capacitance up to 4000pF C style filter*

** *Replace "–" with "F" for RoHS complaint version*

*** *To request selective line filtering, a mechanical configuration or material specification not shown in this catalog, please complete and forward the design inquiry form on page 121. We will review your request and provide you with a part number.*

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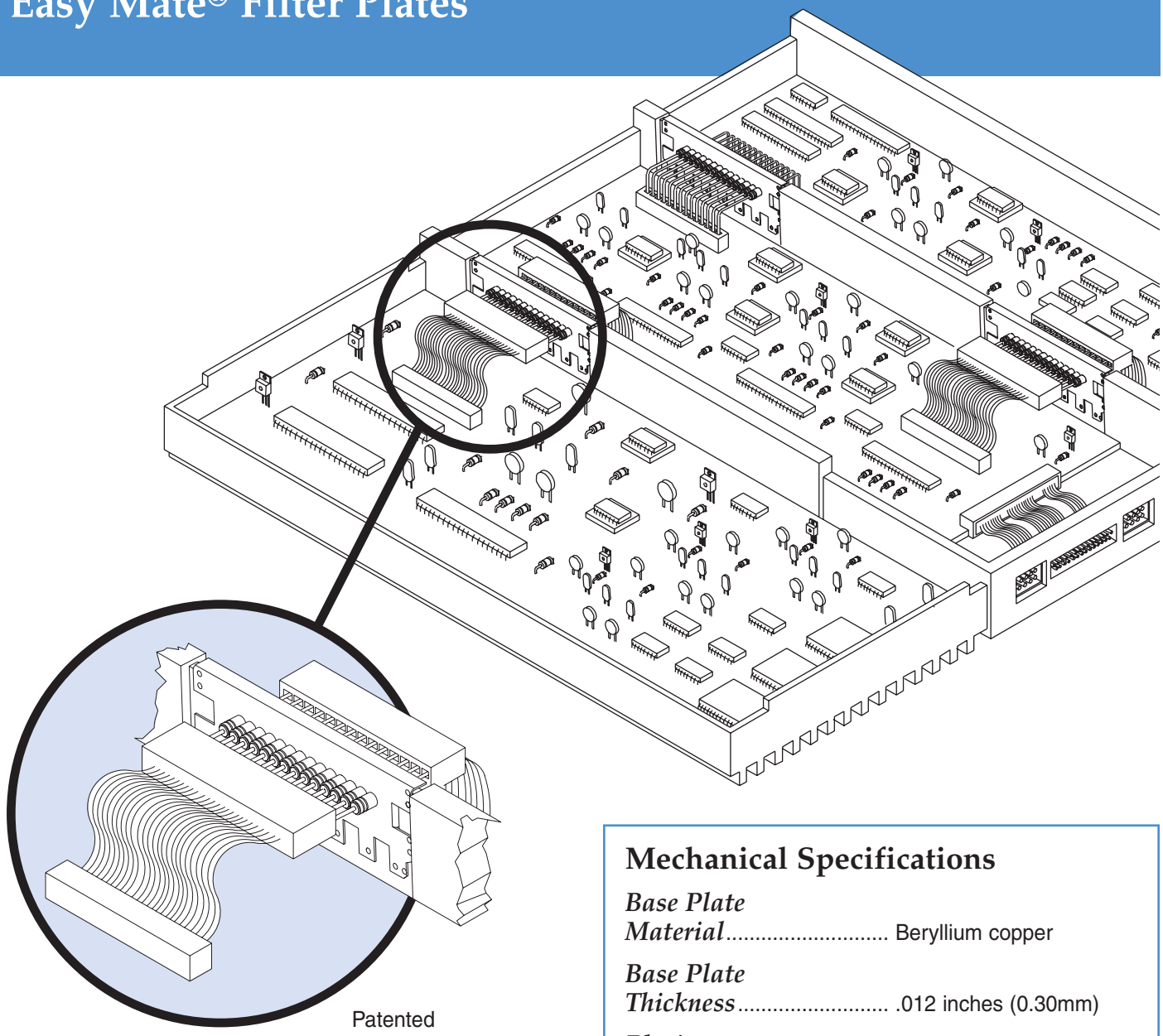
Easy Mate® Filter Plates



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Soldering to Filter Terminals

- Use a temperature controlled soldering iron with tip temperature of 525 ± 10° F (275 ± 5° C).
- Use an SN 63 RMA flux core solder.
- Make mechanical wire connection.
- Use heat sink next to filter body where possible.
- Clean soldering iron tip.
- Clip end of solder—remove 0.5" (12.7mm) to expose flux for soldering.
- Apply soldering iron to wire/flag junction at wetted solder tip region of iron (Wetted Bridge Method). Immediately apply solder. Dwell time for soldering iron tip on product should be 3-5 seconds maximum. (For non-RoHS versions only)

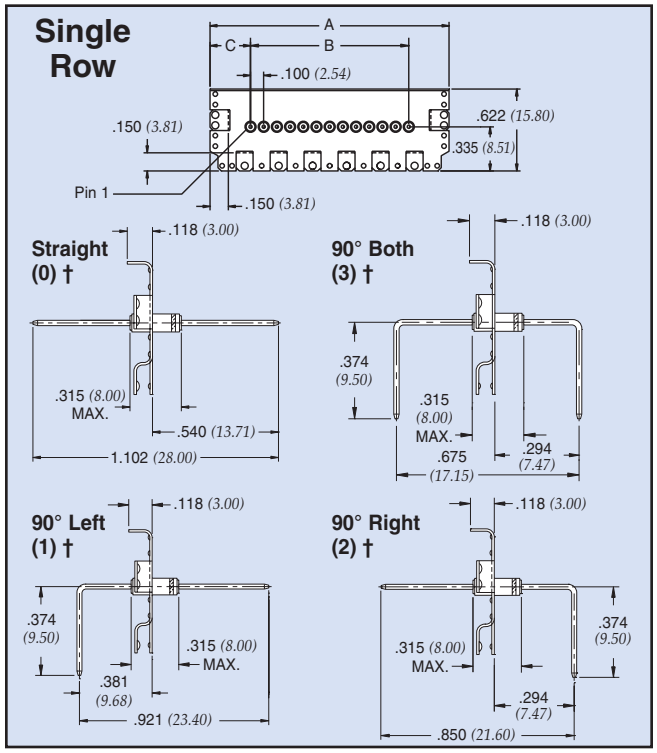
Mechanical Specifications

Base Plate Material	Beryllium copper
Base Plate Thickness	.012 inches (0.30mm)
Plating	Tin, RoHS version will be silver
Lead Material	Copper alloy
Lead Plating	Gold plate
Lead Diameter	ø .025" (.64mm) for 0.100" centers (2.54mm)
	ø .020 (.51mm) for 0.079" centers (2.00mm)
Current Rating	5 Amps for .025" ø (.64mm)
	3 Amps for .020" ø (.51mm)

SPECTRUM CONTROL INC.

Easy Mate® Filter Plates
Standard Density Centers .100"

Dimensions: inches and *(mm)*
Lead Spacing: .100" *(2.54 mm)*



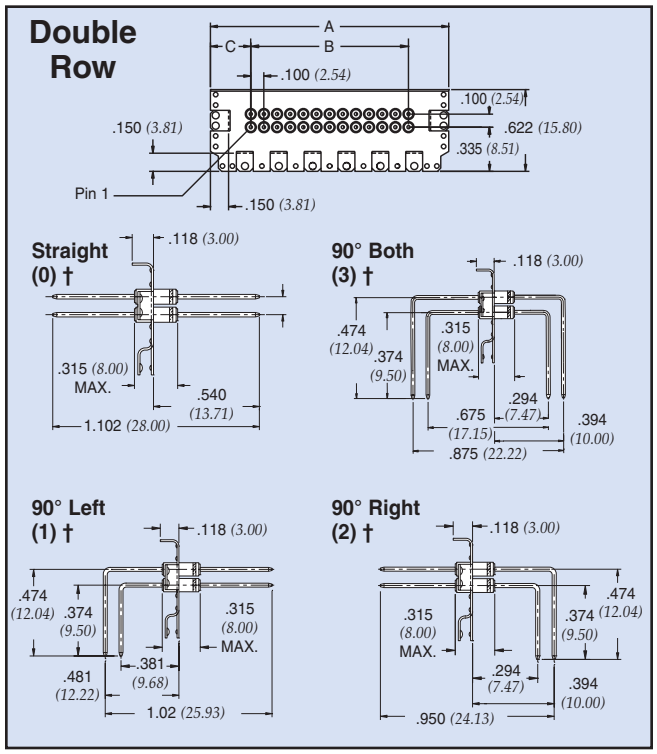
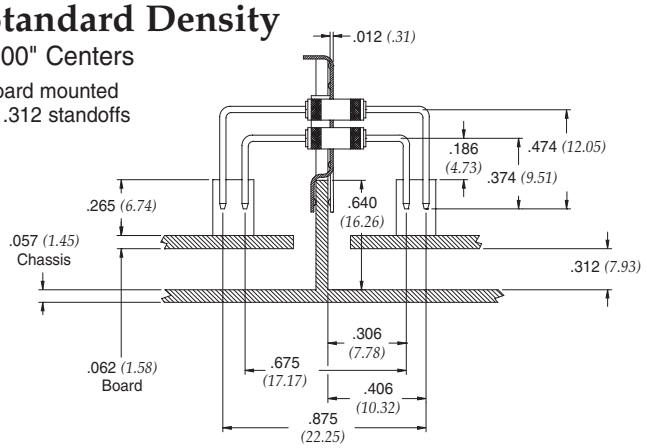


Plate length (A)	No. of filtered lines per row	52-898-XXX-XXX B		C	
1.092 *(27.74)*	1	0	*(0.00)*	0.496	*(12.60)*
	2	0.1	*(2.54)*	0.496	*(12.60)*
	3	0.2	*(5.08)*	0.396	*(10.06)*
	4	0.3	*(7.62)*	0.396	*(10.06)*
	5	0.4	*(10.16)*	0.296	*(7.52)*
	6	0.5	*(12.70)*	0.296	*(7.52)*
1.812 *(46.02)*	1	0	*(0.00)*	0.906	*(23.01)*
	2	0.1	*(2.54)*	0.806	*(20.47)*
	3	0.2	*(5.08)*	0.806	*(20.47)*
	4	0.3	*(7.62)*	0.706	*(17.93)*
	5	0.4	*(10.16)*	0.706	*(17.93)*
	6	0.5	*(12.70)*	0.606	*(15.39)*
	7	0.6	*(15.24)*	0.606	*(15.39)*
	8	0.7	*(17.78)*	0.506	*(12.85)*
	9	0.8	*(20.32)*	0.506	*(12.85)*
	10	0.9	*(22.86)*	0.406	*(10.31)*
	11	1.0	*(25.40)*	0.406	*(10.31)*
	12	1.1	*(27.94)*	0.306	*(7.77)*
	13	1.2	*(30.48)*	0.306	*(7.77)*

Typical Mounting Applications

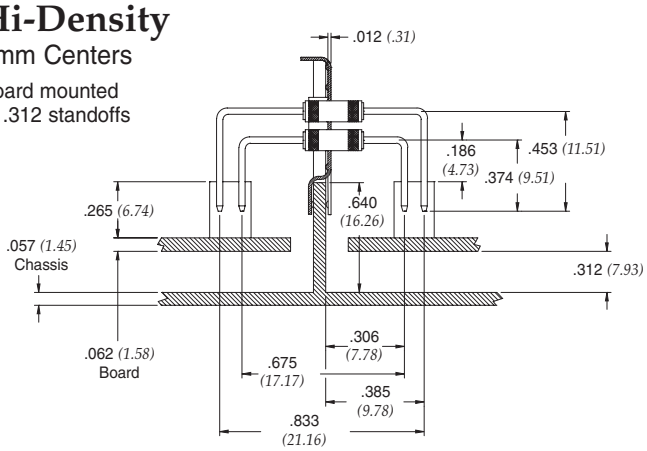
Standard Density
.100" Centers

Board mounted to .312 standoffs



Hi-Density
2mm Centers

Board mounted to .312 standoffs



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† Refers to lead configuration for part number/ordering information

Filtered Arrays

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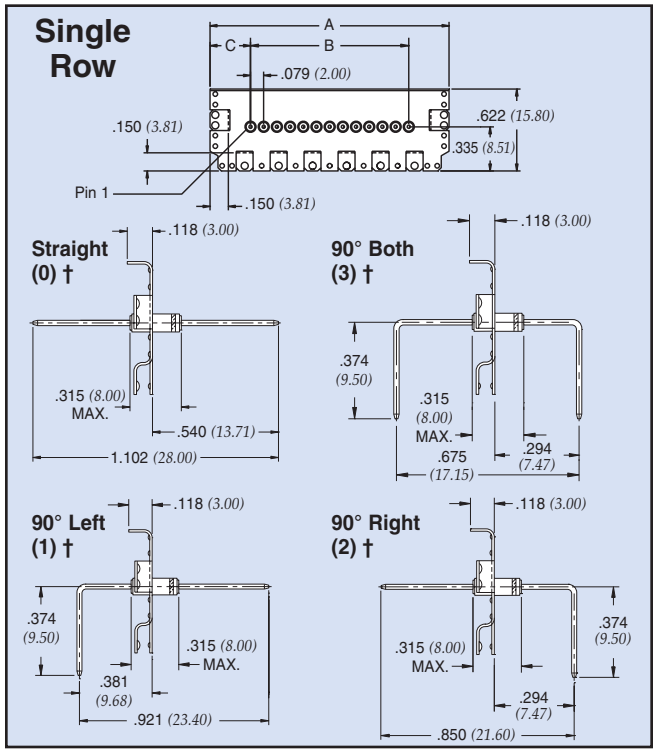
Easy Mate® Filter Plates
Hi-Density Centers 2mm

Dimensions: inches and *(mm)*
Lead Spacing: .079" *(2.00 mm)*



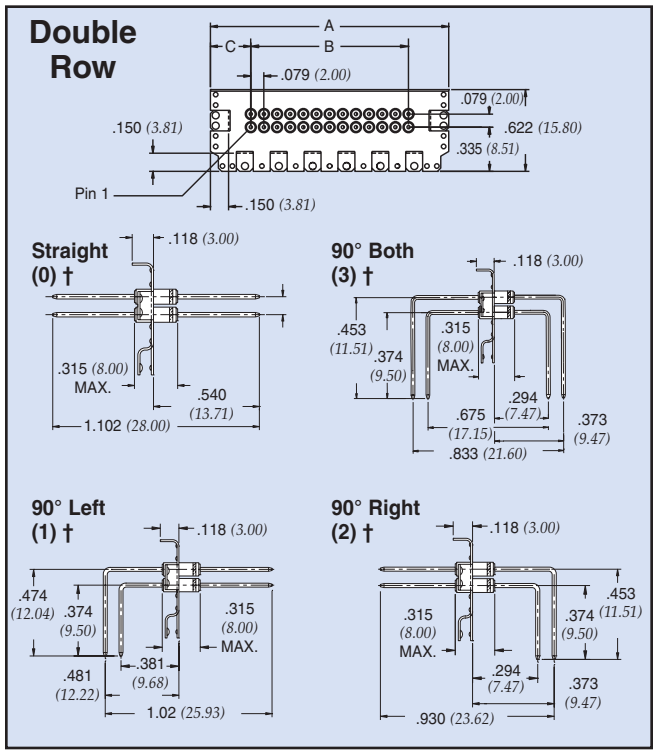
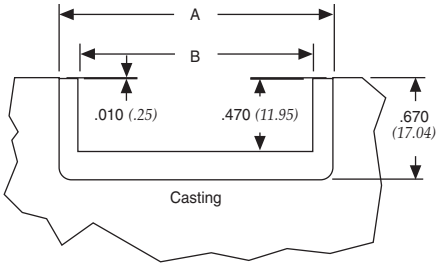


Plate length (A)	No. of filtered lines per row	52-960-XXX-XXX B	52-960-XXX-XXX C
1.092 *(27.74)*	2	0.079 *(2.00)*	0.463 *(11.77)*
	3	0.157 *(4.00)*	0.463 *(11.77)*
	4	0.236 *(6.00)*	0.385 *(9.77)*
	5	0.315 *(8.00)*	0.385 *(9.77)*
	6	0.394 *(10.00)*	0.306 *(7.77)*
	7	0.472 *(12.00)*	0.306 *(7.77)*
1.812 *(46.02)*	2	0.079 *(2.00)*	0.866 *(22.00)*
	3	0.157 *(4.00)*	0.787 *(20.00)*
	4	0.236 *(6.00)*	0.787 *(20.00)*
	5	0.315 *(8.00)*	0.709 *(18.00)*
	6	0.394 *(10.00)*	0.709 *(18.00)*
	7	0.472 *(12.00)*	0.630 *(16.00)*
	8	0.551 *(14.00)*	0.630 *(16.00)*
	9	0.630 *(16.00)*	0.551 *(14.00)*
	10	0.709 *(18.00)*	0.551 *(14.00)*
	11	0.787 *(20.00)*	0.472 *(12.00)*
	12	0.866 *(22.00)*	0.472 *(12.00)*
	13	0.945 *(24.00)*	0.394 *(10.00)*
	14	1.024 *(26.00)*	0.394 *(10.00)*
	15	1.102 *(28.00)*	0.315 *(8.00)*
	16	1.181 *(30.00)*	0.315 *(8.00)*

Easy Mate® Chassis Cut-out Design
Patent Pending



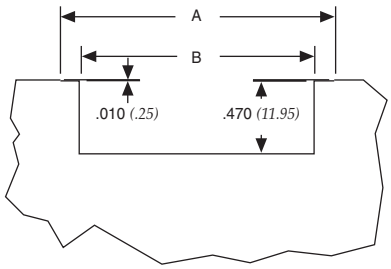


Plate Length	A	B
1.092 *(27.74)*	1.117 *(28.41)*	0.816 *(20.75)*
1.812 *(46.02)*	1.837 *(46.71)*	1.535 *(39.04)*

Patented
† Refers to lead configuration for part number/ordering information